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More than 92 different organizations took part in an expanded conference of the Commission on the Prevention of Corrosion of Metals in Sea Water. They included the Marine Register of the USSR, the Ministries of the Maritime Fleet, the Shipbuilding and Petroleum Industries, the scientific research institutes, educational institutions, industrial plants, and construction offices.

G. V. Akimov, President of the Commission, and Corresponding Member of the Academy of Sciences USSR, presented a report entitled, "Problems of Maritime Corrosion" in which he stated that the rate of corrosion of carbon and low-alloy steels in sea water is only slightly connected with the structure of the steel, and that it is determined chiefly by the chemical composition of the steels, the composition and temperature of the water, and the character of stresses in construction elements. He showed that the corrosion of iron and steel in sea water and in a maritime atmosphere is attributable to the type of corrosion processes which is accompanied by oxygen depolarization. A considerable part of the report was devoted to methods of guarding against corrosion on maritime constructions.

A second report on "Corrosion of Metals in Maritime Hydraulic Structures" was read by V. N. Yefremov, Candidate of Technical Sciences. He stated that in the marine hydrotechnical field, the life of reinforced concrete structures in the USSR is about 15 to 20 years.

Yu. S. Suzin, Chief Engineer, Maritime Register USSR, in a report entitled "Corrosion of Ships and Damage Caused to Ships of the Maritime Fleet" considered several new aspects of the investigation in accordance with tank tests made by the Maritime Register. These aspects included: the increased corrosion of rivets after having been repaired by welding; the effects of segregation

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and adhesion on the corrosion of rivets; the corrosion of seams and the metal surrounding the seams; and the effect of welding processes. The author notes instances of wear caused by violating the scheduled periods for overhaul and painting, and suggests some methods for prognosis of the causes of corrosion of the various elements of the ships, as well as methods to safeguard against them.

The following reports were also presented: (1) "Corrosion of the Equipment of Oil Companies in Sea Water" by V. V. Negreyev; (2) "Fundamentals of Cathodic Protection for Marine Pipe Lines" by V. A. Pritul'; (3) "Corrosion of Condenser Pipes of Maritime Power Installations" by Yu. D. Red'ko, Candidate of Technical Sciences; (4) "The Testing of Corrosion of Metals in Sea Water" by V. I. Vul'fson, Candidate of Chemical Sciences; (5) "Corrosion and Marine Growths" by N. I. Tarasov, Candidate of Biological Sciences; (6) "Investigation of Corrosion Fatigue and of Methods for the Protection of Steel in Sea Water" by A. V. Ryabchenkov, Candidate of Technical Sciences; (7) "Corrosion of Aluminum Alloys in Sea Water" by Engineer S. Ye. Pavlov;

(8) "Results of Laboratory Tests on Cast Aluminum Alloys Under Stress with Respect to Corrosion as a Result of Periodic Immersion in a 3 Percent Solution of Sodium Chloride" by . . I. Rozov, Candidate of Technical Sciences; (9) "Protection of Ship Hulls from Corrosion in Sea Water by Lacquer Coating" by Ye. S. Gurevich, Candidate of Technical Sciences; (10) "The Establishment of Metallurgical Courses Dealing With the Corrosion of Metals at Machine-Building and Shipbuilding Higher Technical Schools" by Professor N. A. Shaposhnikov.

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